

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: THOMAS I. INSLEY et al.

Serial No.:

09/099,632

Filed:

June 18, 1998

For:

MICROCHANNELED

ACTIVE FLUID HEAT

EXCHANGER

Examiner:

Leo. L.

Group Art Unit: 3743

RECEIVED

Docket No.

27987-208414TECHNOLOGY CENTER 3700

Commissioner for Patents Washington, D.C. 20231

I CERTIFY THAT, ON JULY 31, 2000, THIS PAPER IS BEING DEPOSITED WITH THE U.S. POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO THE COMMISSIONER FOR PATENTS. WASHINGTON, D.C. 20231

AMENDMENT

This Amendment is responsive to the outstanding Office Action mailed March 30, 2000. A one month extension of time has been requested and the appropriate fee has been paid. Please amend the application as follows:

IN THE CLAIMS

Please cancel claims 26-30 without prejudice or disclaimer.

Please amend the claims as follows:

- 1. (Amended) A heat exchanger for use with active fluid transport, comprising:
 - (a) a first layer of polymeric <u>film</u> material having first and second major surfaces, wherein the first major surface includes a structured surface having a plurality of flow channels that extend from a first point to a second point along the surface of the first layer and that have a minimum aspect ratio of the channel's length to its hydraulic radius of about 10:1 and a hydraulic radius of no greater than about 300 micrometers:
 - (b) a first cover layer that overlies at least a portion of the structured polymeric surface and includes a closing surface to cover at least a portion of the plurality of flow channels to make plural substantially discrete flow passages; and

